

Reports from the workshops

Workshop A: How to use the internet safely and responsibly: Information for teachers

Matthias Jax, Austrian Institute for Applied Telecommunications

After presenting websites such as <https://www.saferinternet.at/> and <https://www.betterinternetforkids.eu/>, where teachers can find many materials and resources about how to use internet safely, the workshop moderator showed some statements to the participants such as:

- I like digital devices and I use them a lot
- I think digital devices are useful and help
- The smartphone is dangerous for kids
- I can't live without the internet today
- I am well prepared to work with students on digital media

For each statement, the participants were asked to move into the room according to their thought (I agree/I disagree). Once the people were standing, some of them were asked to explain the reason why he/she agreed or disagreed. For example, most of the participants said that they are using digital devices every day and that they consider them helpful, in the meantime most of them strongly agreed that smartphones can be dangerous for kids, but some others said that this can be true also for adults.

Everybody agreed that it's important to teach media literacy to very young children (in some cases they own their first smartphone at primary school!). The current young generation is called the "Head Down" generation, because of the use of smartphones. The Internet is mainly used by young people for communication (e.g. social networks) and entertainment (e.g. streaming, music, gaming). The workshop moderator talked about the most popular apps among the young people, showing some videos from Tik Tok, an app which is becoming more and more popular among the young generation. Actually we don't really know what the young people are doing on their smartphones - maybe they are reading news!-, but for sure they need to be educated (e.g. copyright, private & public). It's important also to set limits to the use of internet/digital devices and to offer alternatives.

In the current situation it's a matter of fact that the relevant topics for teachers are copyrights, cyberbullying, data protection/security, BYOD at school, violence/content harmful, and source criticism. One of the important takeaways was: "We need to encourage children to express their emotions, to ask for help if needed and tell if they are in trouble or in danger".

Workshop B: Digital Games for 21st century skills

Thomas Wernbacher and Nikolaus König, Danube University Krems

After the theoretical introduction (importance of gaming in the learning process, what is the difference between a game and a quiz, designing with CDG4E) Thomas Wernbacher and Nikolaus König presented a game creator tool developed during the Erasmus+ project Create Digital Games for Education. The tool is available here: <https://wazagames.com/cdq4e/> (username: Others; password: Example1). The workshop leaders concluded: "Games have been recognised as powerful learning tools to facilitate students' learning."



Workshop C: Computational Thinking with BBC micro:bit

Maria Grandl and Katharina Hohla, Graz University of Technology

The workshop leaders presented computational thinking as an important method in solving problems systematically – not just for computer scientists, but for everyone and important in developing in today’s pupils. It was emphasized that “Pupils need a digitized future”. There are four steps of computational thinking: (1) Decomposition; (2) Pattern recognition; (3) Abstraction; (4) Algorithms. These steps were explained and the participants could try out immediately some exercises with simple coding of the BBC micro:bit. The BBC micro:bit is an open source hardware ARM-based embedded system, with a display consisting of 25 LEDs, two programmable buttons, and can be powered by either USB or an external battery pack. Using coding, participants could turn on the LED lights in simple patterns (e.g. a smiley-face).

Workshop D: How the SELFIE tool can help your school with digital technology use?

Deirdre Hodson, European Commission

As motivation for the development of the SELFIE tool, Ms. Hodson first discussed some of the challenges of technology use in schools – e.g. Management: need of guidance; Time consuming to build your own material at first; Equipment issues; Parents don’t always support the use of technology; Different skill levels of students. In spite of the challenges, it is important to keep in mind: “They are going to use their phones anyway, even if it’s forbidden. So if you include smartphones in your lesson, maybe they’ll learn to use them properly.”



A brief introduction of the SELFIE tool followed (see also <https://www.youtube.com/watch?v=V0Yi0OuHpT8&t>). SELFIE is part of the digital education strategy at the European level. It was built in cooperation with schools with the will that schools would use it. The result is an internal assessment of your school’s readiness for the digital age – not as a reporting tool, but as a starting point for further school development. students, teachers and school leaders to take part in SELFIE on an anonymous basis. It takes around 30 minutes to complete the questions. Teachers and school leaders can do this at a time that suits them, while it is recommended that students answer as part of a lesson. In group work, the workshop participants got familiar with the 6 areas covered by SELFIE (Management, Infrastructure & Equipment, CPD, Teaching & Learning, Assessment practices, Student Digital Competence). They also analysed the results of a fictional school and considered possible improvement.

Workshop E: Capacity building for teachers

Rute Baptista, eTwinning Central Support Service / European Schoolnet

How can eTwinning contribute to build teachers' capacity for success, so they're empowered to plan, reflect, and process through the barrage of change in a way that meets their students' needs?

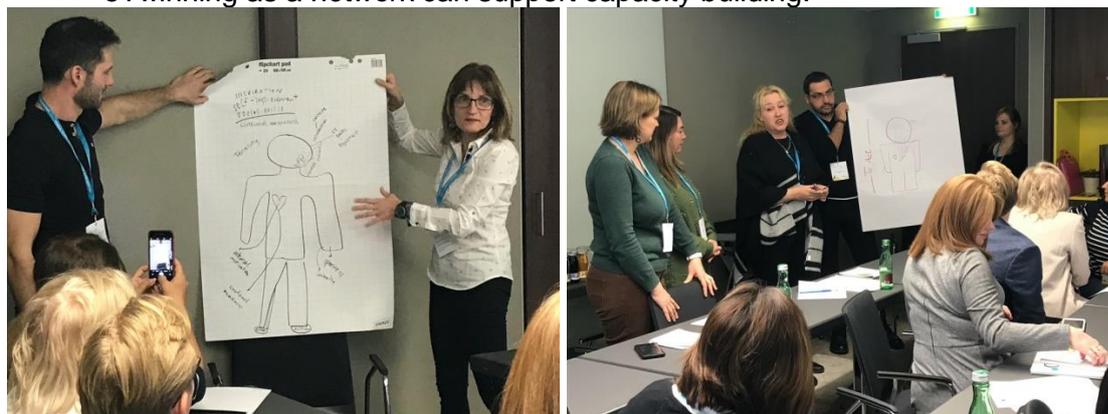
During the discussion, the participants concluded that eTwinning can improve your skills in tech, especially peer-to-peer. eTwinning is also motivating students, helping to improve language skills, opens the school to the real world, leads to amusement in class.

Ms. Baptista invited the participants to visit <https://metp.etwinning.net/> (Monitoring eTwinning Practice) and discover aspects of eTwinning tailored to their own needs.

Furthermore, [3 Knowledge Domains For The 21st-Century Student](#) (to know, to value, to add) were presented and discussed.

The main conclusions include:

- We cannot control everything, but we can have an impact! We can control ourselves, have impact on the social context.
- The most important thing in capacity building is the person next to you. We need to support each other.
- eTwinning as a *network* can support capacity building.



Workshop F: Speed-dating with AI

Dani McCallion, Makeblock Co., Ltd.

Participants were asked to split in groups and answer three questions: (1) What is AI? (2) What does it look like? (3) Where is AI being used?

During the workshop participants learned how to write their own block-based code (using mBlock) and to make "Codey Rocky" to determine their age. The app used during the workshop has an extra layer of security, is therefore especially appropriate for use with children. Furthermore, "Codey Rocky" can distinguish colours – it can therefore be used during language lessons (learning colours).

Activities:

- Writing a code so that mBlock analyses and displays your age
- Trying different options to solve the problem
- Working in groups, sharing ideas, reach agreements to solve the problem

Workshop G: What education should not forget to deliver

Axel Zahlut, Innovationsschule

This workshop focused on three dimensions of education; students, teachers and the society. First, the physical and emotional needs of students and how these should be handled by teachers was discussed. The speaker stressed the importance of being aware of the changing world and the need to adapt to these changes while designing the educational environments-the fact that students, today, live in a world of technology and connections should be taken into consideration.

Another point discussed was the way a teacher should keep up with the changing world of the education. The participants mostly stated that the role of the teacher is considered to be less important compared to the past. Teaching methodology should be adapted in a way that it makes possible to create more flexible learning environments.

There was also a mini quiz which was designed to see how much someone has a growth mindset comparing it to the level of fixed mindset, followed by a question to discuss how to build growth mindset in students.

Then, the role of the society in education was discussed. The participants stated their opinions about the changing role of teachers due to the change in societies and its reflection in classrooms. Each stakeholder in the society has the responsibility to contribute to the growth, so they should be involved in providing the necessary educational environments for the students.



Workshop H: Ideas Powered

Kari Kivinen, Lycée franco-finlandais d'Helsinki

Mr. Kivinen opened with: "There are two concepts to keep in mind: imagination and innovation. Imagination is the root of creativity. (Ken Robinson)"

The participants completed several tasks inviting them to be creative. The prompt: "Remember - You work with creative minds!"

It was next discussed how to protect the products of your own creativity and use what others have created. "Be aware of trademarks (protect your trademark), designs (it can change the value of the product), copyrights (certain value for you - you need to prove that you have made first, you don't have to go anywhere, send by mail for instance, music register etc.) (As teachers you can use [creative commons](https://creativecommons.org/))."

It was recommended to invite artists/designers/creative people to school, to present powerful ideas.

Resources for protection of intellectual property: <https://ideaspowered.eu/en>

Workshop I: Education Innovation Studio (EIS)

(off-site workshop at the University College of Teacher Education, Vienna)

The EIS is one of innovation points for research, education, further education and school development of the Center for Innovation in Learning and Teaching. EIS focuses on coding, robotics and storytelling.

The current offer of EIS for Viennese and other teachers was presented by Mr. Paul Szepannek, who proceeded to show some exercises with LEGO Education tools and BeeBots to the participants in the workshop.



Workshop J: Future Learning Lab (FLL)

(off-site workshop at the University College of Teacher Education, Vienna)



The FLL is part of the European network of classroom labs with a common educational and pedagogical concept. More information is available under: <http://fcl.eun.org/>. The Future Classroom Lab is formed by six different learning spaces. Each space highlights specific areas of learning and teaching: Create, Interact, Present, Investigate, Exchange, Develop. Mr. Hermann Morgenbesser explained each one and how they can be implemented in various school subjects (e.g. story-telling in language teaching).

To see whether there is a future classroom lab in your country, you can contact an ambassador: <http://fcl.eun.org/fcl-ambassadors>.

Mr. Morgenbesser also presented <https://fairapps.net/home>, a resource with open-source apps which anyone can use (developed in Austria), and showed some of the technology used in the makers' space of the Future Learning Lab: 3D printer, Makeblock, etc.

Workshop K: FLIP – Erste Financial Life Part

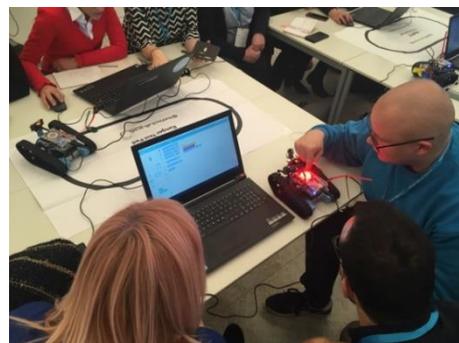
(off-site workshop)

[report will be added soon]

Workshop L: Da Vinci Lab
(off-site workshop)

Anna Gawin from Da Vinci Lab gave a short introduction about what the company is doing and what types of workshops they are offering for students and teachers. She presented various tools which can be used in the classroom to enhance computational thinking. Ms. Gawin described their mission as: “It’s about making technological innovation interesting for girls and for boys”. The Da Vinci Lab “Learning Journey” is based on three main steps: to discover – to understand – to create.

This particular workshop focused on coding & robotics. After the introduction the participants had the opportunity to try out the Makeblock Ranger, a robotic vehicle which can be programmed to perform various tasks. The participating teachers had a lot of fun investigating the possibilities and some were surprised how easy applicable this would be for their classes.



Workshop M: Visit to NMSi Feuerbachstraße – middle school with a focus on informatics
(off-site workshop)

NMSi Feuerbachstraße is one of the leading schools in the Austrian eEducation initiative to advance digital and ICT-based competences.

Klaus Spätauf, maths and geography teacher at NMSi Feuerbachstrasse, presented the journey and challenges of the last couple of years in school to now, where every pupil of the iPad classes has his or her own iPad. Teachers combine analogue and digital education, e.g. the students may hand in their handwritten homework online and get the feedback also via the iPad. The most important element of digital education is the teacher training; also co-teaching has proven very useful. It was emphasized that “Teachers who stand still should need to explain themselves, not those who want to change their teaching”.

After the introduction, pupils showed the participants how and what they learn with the iPads. They had prepared a market place and presented their ways of using the iPad in learning e.g. coding, music or biology. Another class having a vocational information lesson was visited and the participants had the opportunity to discover the school on a tour through the 100+ years old building.

